Excel Fundamentals - Quick Start Guide

CFI

Learning Objectives

Identify the main parts of the Excel 365 interface and their purposes.

Explain the advantage of using the keyboard and memorize basic shortcuts.

Recommend Excel settings which are helpful for finance professionals.

Setup the Quick Access Toolbar to improve speed and efficiency.

Explain the most common Excel features used for financial analysis.

Recommend more advanced Excel features used in the finance industry.

Course Instructor - Duncan

Duncan McKeen

EVP, Financial Modeling

About Duncan...

Since 2014, Duncan has been focused on designing courses and teaching financial modeling to employees working in accounting, valuation, investment banking, equity research, and private equity. He also has extensive experience providing consulting services on financial modeling to large corporations and institutions. Prior to transitioning over to teaching, Duncan held senior equity research positions with top banks & brokerages using financial models to form opinions and guide institutional investors with capital allocation. Since 2015, he has also been an Adjunct Faculty member teaching financial modeling courses at the Smith School of Business at Queen's University.

Introduction

Keyboard Over Mouse

Finance professionals use the keyboard over the mouse for a few reasons:

- Perform tasks faster and more effectively.

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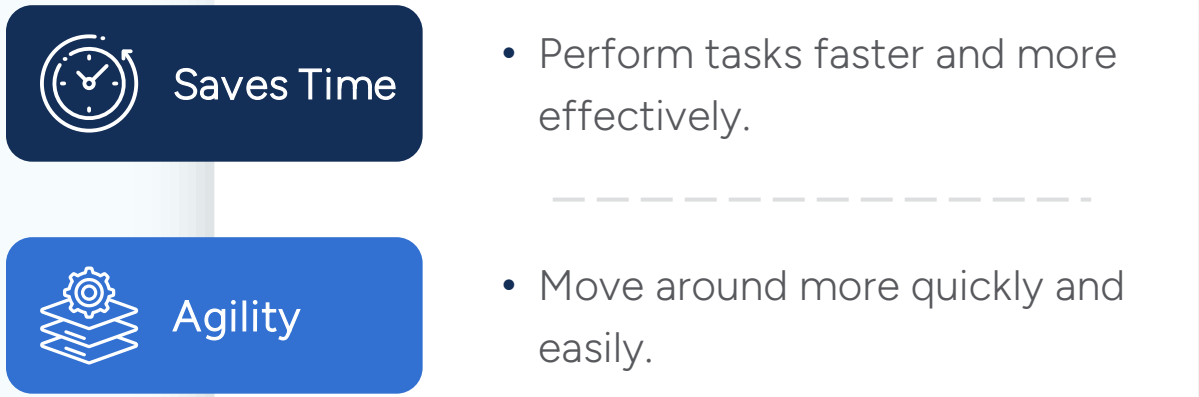

Keyboard Over Mouse

Finance professionals use the keyboard over the mouse for a few reasons:

Saves Time
Perform tasks faster and more effectively.
Agility
Move around more quickly and easily.
Fun
Enjoy learning a new skill and working more efficiently.

Keyboard Over Mouse

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Saves Time

- Perform tasks faster and more effectively.

Agility

- Move around more quickly and easily.

Fun

- Enjoy learning a new skill and working more efficiently.

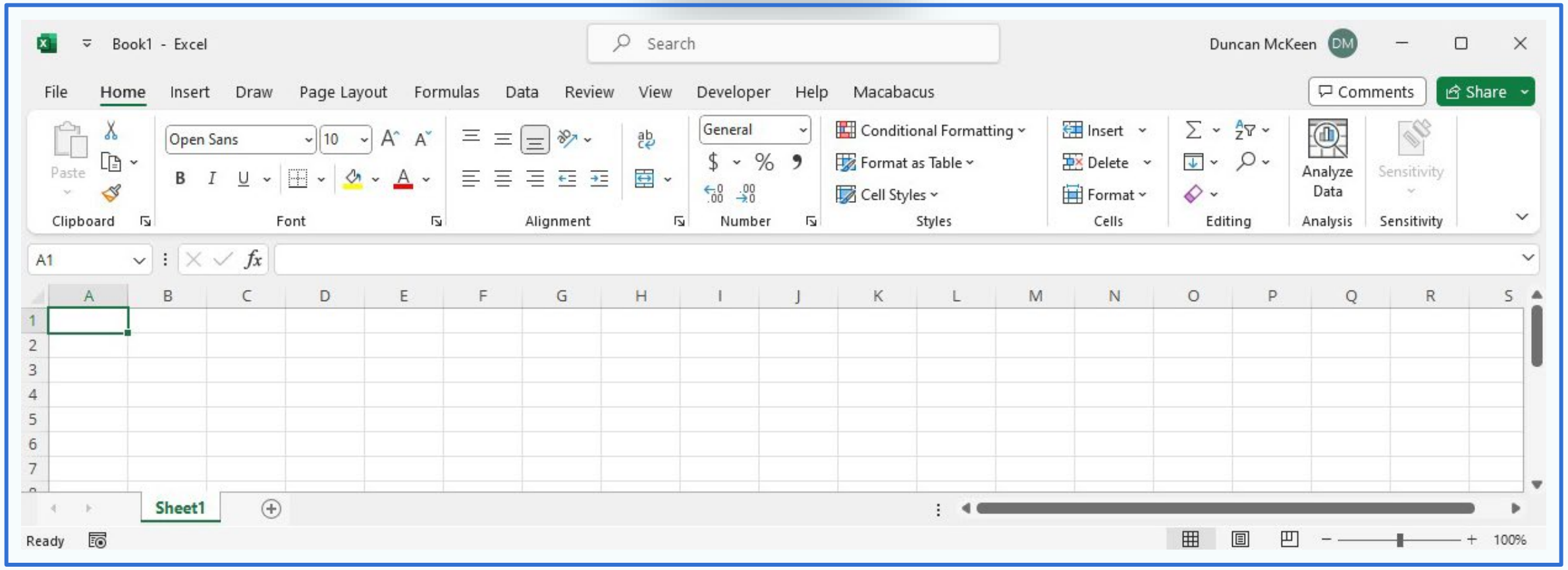
Challenge yourself to **not use your mouse.**

Slower in short run; much faster in long run

Excel Layout

Excel Layout

Workbook



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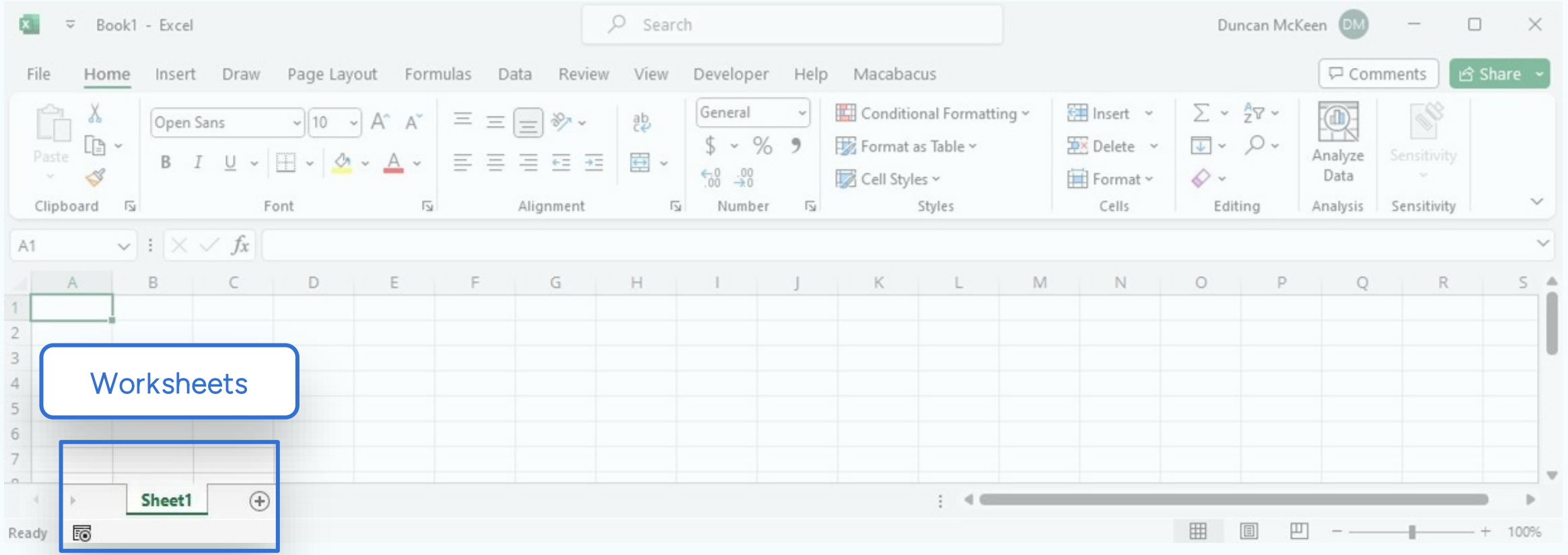

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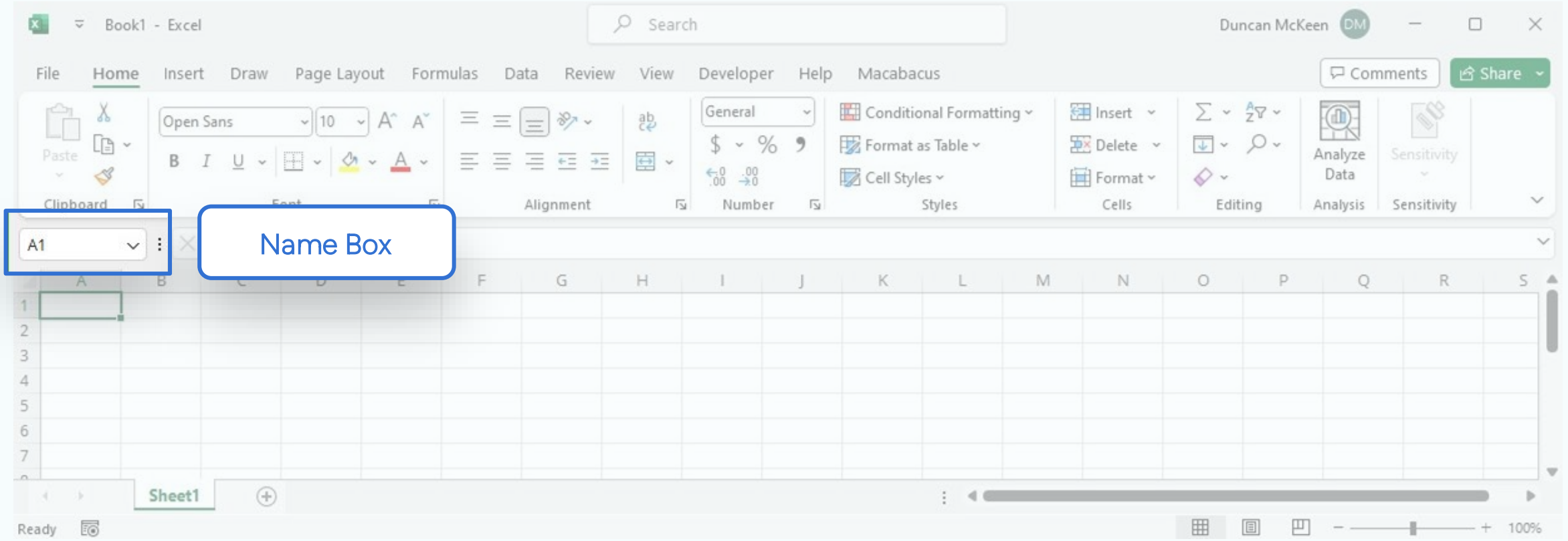

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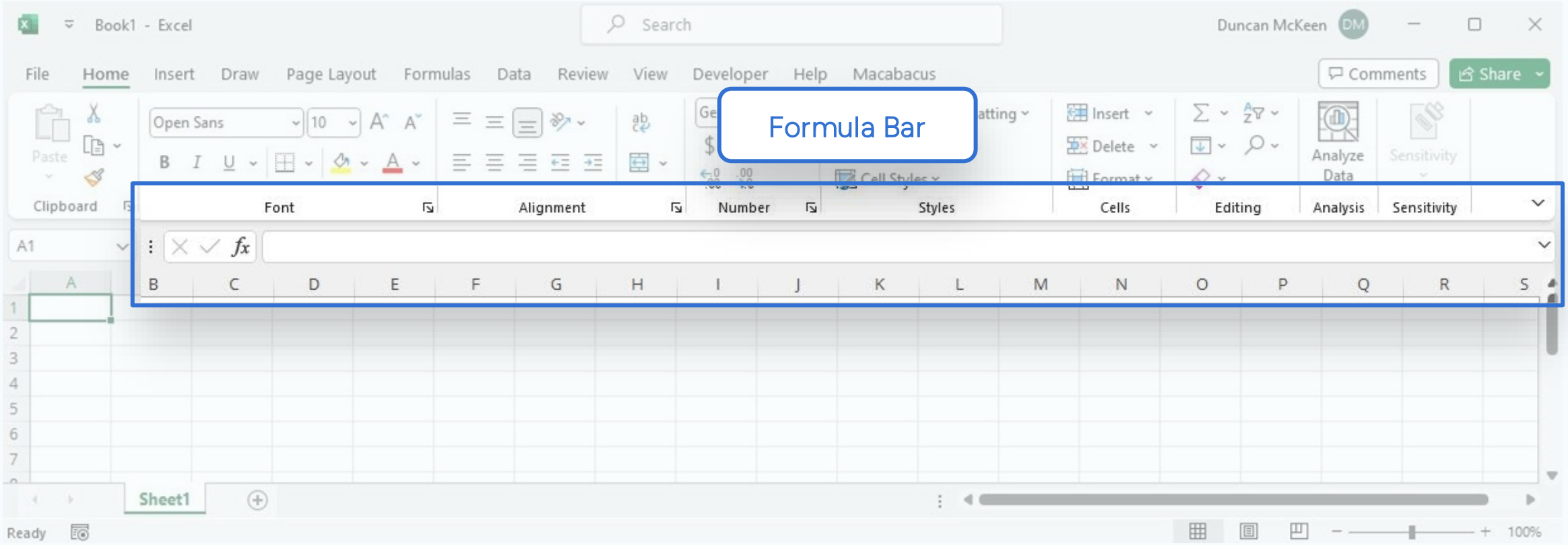

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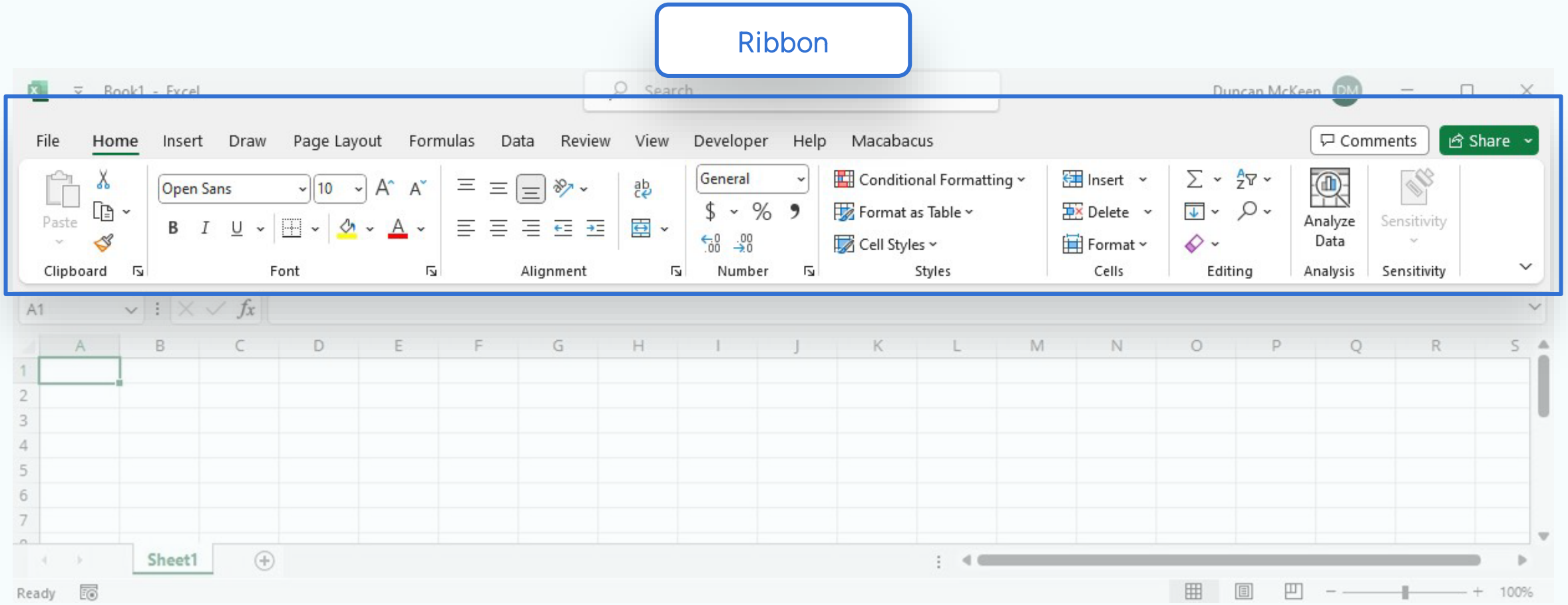


Excel Settings

Chapter Objectives

Understand the most important **general settings** to optimize in Microsoft Excel file.

Review the **formula settings** and the calculation options we recommend.

Discuss other **important settings** recommended to finance professionals engaged in analysis.

Recommend some **advanced options** and learn how to set up the **Quick Access Toolbar**.

Basic Financial Setup

Importance of Clean Formatting

Layout and structure are the most important parts of financial modeling and analysis.

What separates great work from the rest?

Having clean formatting is absolutely critical it makes all the difference for your users.

- Easy to follow
- Dynamic
- Easy to understand
- Easy to edit
- Accurate & detailed
- Easy to audit

Advanced Financial Setup

Chapter Objectives

Enable you to **handle more complex situations** when performing financial analysis.

Make your analysis more dynamic through automatic updates and easy changes.

Make sure your analysis is detailed and precise producing a professional grade output.

Summary

Keep Practicing

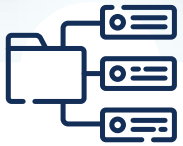
The best courses to practice excel skills learned in this course are:

Introduction to Business Valuation

Introduction to 3-Statement Modeling

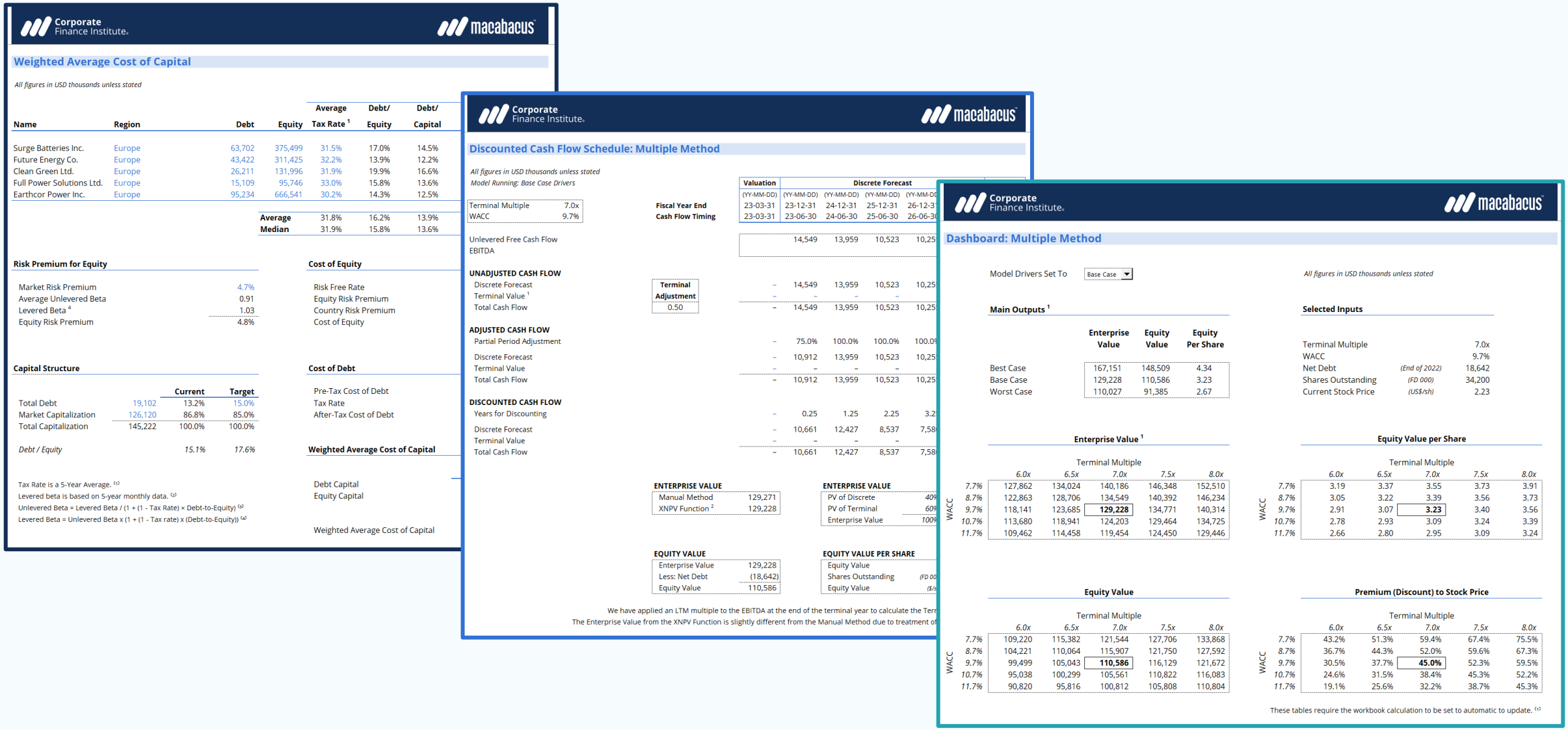
Operational Modeling

DCF Valuation Modeling



3-Statement Modeling

Financial Model Examples



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Weighted Average Cost of Capital

All figures in USD thousands unless stated

Name	Region	Debt	Equity	Average Tax Rate [1]	Debt/ Equity	Debt/ Capital
Surge Batteries Inc.	Europe	63,702	375,499	31.5%	17.0%	14.5%
Future Energy Co.	Europe	43,422	311,425	32.2%	13.9%	12.2%
Clean Green Ltd.	Europe	26,211	131,996	31.9%	19.9%	16.6%
Full Power Solutions Ltd.	Europe	15,109	95,746	33.0%	15.8%	13.6%
Earthcor Power Inc.	Europe	95,234	666,541	30.2%	14.3%	12.5%
			Average	31.8%	16.2%	13.9%
			Median	31.9%	15.8%	13.6%

Risk Premium for Equity

Market Risk Premium	4.7%
Average Unlevered Beta	0.91
Levered Beta [4]	1.03
Equity Risk Premium	4.8%

Cost of Equity

Risk Free Rate
Equity Risk Premium
Country Risk Premium
Cost of Equity

Capital Structure

		Current	Target
Total Debt	19,102	13.2%	15.0%
Market Capitalization	126,120	86.8%	85.0%
Total Capitalization	145,222	100.0%	100.0%
Debt / Equity		*15.1%*	*17.6%*

Cost of Debt

Pre-Tax Cost of Debt
Tax Rate
After-Tax Cost of Debt

Weighted Average Cost of Capital

Debt Capital
Equity Capital

Weighted Average Cost of Capital

Tax Rate is a 5-Year Average. [2]
Levered beta is based on 5-year monthly data. [3]
Unlevered Beta = Levered Beta / (1 + (1 - Tax Rate) × Debt-to-Equity) [3]
Levered Beta = Unlevered Beta x (1 + (1 - Tax rate) x (Debt-to-Equity)) [4]

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Discounted Cash Flow Schedule: Multiple Method

All figures in USD thousands unless stated
Model Running: Base Case Drivers

Terminal Multiple	7.0x
WACC	9.7%

	Valuation	Discrete Forecast				
	(YY-MM-DD)	(YY-MM-DD)	(YY-MM-DD)	(YY-MM-DD)	(YY-MM-DD)	(YY-MM-DD)
Fiscal Year End	23-03-31	23-12-31	24-12-31	25-12-31	26-12-31	
Cash Flow Timing	23-03-31	23-06-30	24-06-30	25-06-30	26-06-30	
Unlevered Free Cash Flow		14,549	13,959	10,523	10,25	
EBITDA						
UNADJUSTED CASH FLOW						
Discrete Forecast	–	14,549	13,959	10,523	10,25	
Terminal Value [1]	–	–	–	–		
Total Cash Flow	–	14,549	13,959	10,523	10,25	
ADJUSTED CASH FLOW						
Partial Period Adjustment	–	75.0%	100.0%	100.0%	100.0	
Discrete Forecast	–	10,912	13,959	10,523	10,25	
Terminal Value	–	–	–	–		
Total Cash Flow	–	10,912	13,959	10,523	10,25	
DISCOUNTED CASH FLOW						
Years for Discounting	–	0.25	1.25	2.25	3.2	
Discrete Forecast	–	10,661	12,427	8,537	7,58	
Terminal Value	–	–	–	–		
Total Cash Flow	–	10,661	12,427	8,537	7,58	

Terminal Adjustment
0.50

ENTERPRISE VALUE

Manual Method	129,271
XNPV Function [2]	129,228

ENTERPRISE VALUE

PV of Discrete	40%
PV of Terminal	60%
Enterprise Value	100%

EQUITY VALUE

Enterprise Value	129,228
Less: Net Debt	(18,642)
Equity Value	110,586

EQUITY VALUE PER SHARE

Equity Value	
Shares Outstanding	(FD 00
Equity Value	($/s

We have applied an LTM multiple to the EBITDA at the end of the terminal year to calculate the Terr
The Enterprise Value from the XNPV Function is slightly different from the Manual Method due to treatment of

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Dashboard: Multiple Method

Model Drivers Set To: Base Case

All figures in USD thousands unless stated

Main Outputs [1]

	Enterprise Value	Equity Value	Equity Per Share
Best Case	167,151	148,509	4.34
Base Case	129,228	110,586	3.23
Worst Case	110,027	91,385	2.67

Selected Inputs

Terminal Multiple		7.0x
WACC		9.7%
Net Debt	*(End of 2022)*	18,642
Shares Outstanding	*(FD 000)*	34,200
Current Stock Price	*(US$/sh)*	2.23

Enterprise Value [1]

WACC \ Terminal Multiple	6.0x	6.5x	7.0x	7.5x	8.0x
7.7%	127,862	134,024	140,186	146,348	152,510
8.7%	122,863	128,706	134,549	140,392	146,234
9.7%	118,141	123,685	**129,228**	134,771	140,314
10.7%	113,680	118,941	124,203	129,464	134,725
11.7%	109,462	114,458	119,454	124,450	129,446

Equity Value per Share

WACC \ Terminal Multiple	6.0x	6.5x	7.0x	7.5x	8.0x
7.7%	3.19	3.37	3.55	3.73	3.91
8.7%	3.05	3.22	3.39	3.56	3.73
9.7%	2.91	3.07	**3.23**	3.40	3.56
10.7%	2.78	2.93	3.09	3.24	3.39
11.7%	2.66	2.80	2.95	3.09	3.24

Equity Value

WACC \ Terminal Multiple	6.0x	6.5x	7.0x	7.5x	8.0x
7.7%	109,220	115,382	121,544	127,706	133,868
8.7%	104,221	110,064	115,907	121,750	127,592
9.7%	99,499	105,043	**110,586**	116,129	121,672
10.7%	95,038	100,299	105,561	110,822	116,083
11.7%	90,820	95,816	100,812	105,808	110,804

Premium (Discount) to Stock Price

WACC \ Terminal Multiple	6.0x	6.5x	7.0x	7.5x	8.0x
7.7%	43.2%	51.3%	59.4%	67.4%	75.5%
8.7%	36.7%	44.3%	52.0%	59.6%	67.3%
9.7%	30.5%	37.7%	**45.0%**	52.3%	59.5%
10.7%	24.6%	31.5%	38.4%	45.3%	52.2%
11.7%	19.1%	25.6%	32.2%	38.7%	45.3%

These tables require the workbook calculation to be set to automatic to update. [1]